IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Scott Cordner		
Assignee:	Cypress Semiconductor Corporation		
Title:	INTELLIGENT EXTENSIBLE SIE PERIPHERAL DEVICE		
Serial No.:	09/823,414	Filed:	March 31, 2001
Examiner:	Dang, K.	Art Unit:	2181
Attorney Docket No.:	0325.00459		

Commissioner for Patents
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DECLARATION OF ANDREW WARREN PURSUANT TO 37 C.F.R. § 1.132

I, Andrew Warren hereby declare as follows:

1. I am presently employed as Principal Design Engineer by Cypress Semiconductor Corporation ("Cypress").

2 I have been employed by Cypress since June, 2000 in various capacities.

3. I have reviewed the relevant portions of the specification and the claims of the present invention, the relevant portions of the relevant Office Action, and the relevant portions of U.S. Patent No. 6,370,603 to Silverman et al.

4. I understand that in one embodiment the present invention concerns:

An apparatus for coupling a peripheral device to a host comprising:

an interface circuit configured to receive a request from the host and present a response to the request to the host; and

a serial interface engine (SIE) coupled to the interface circuit and configured to (i) automatically generate the response to the request when the request is a first type of request that the serial interface engine is configured to recognize and (ii) pass (a) the request from the interface circuit to an external circuit and (b) the response to the request from the external circuit to the interface circuit when the request is a second type of request that the serial interface engine is not configured to recognize.

5. I understand that in another embodiment the present invention concerns:

An apparatus comprising:

means for receiving a request from a host and presenting a response to the request to the host;

means for generating the response automatically when the request is of a first type recognized by the generating means; and

means for passing (i) said request from the receiving and presenting means to an external circuit and (ii) the response from the external circuit to the receiving and presenting means when the request is of a second type not recognized by the generating means.

6. I understand that in another embodiment the present invention concerns:

A method for interfacing a peripheral device to a host comprising the steps of:

receiving a request from the host;

automatically responding to the request within a serial interface engine when the request is a first type of request that the serial interface engine is configured to recognize;

when the request is a second type of request that the serial interface engine is not configured to recognize, passing the request to an external circuit;

receiving a response to the request from the external circuit when the request is of the second type; and

passing on the response to the host.

7. The passages of U.S. Patent No. 6,370,603 to Silverman et al. cited in the Office Action (i.e., column 6, lines 11-19, column 7, lines 6-15 and column 9, lines 25-47) do not disclose or suggest a serial interface engine (SIE) coupled to the interface circuit and configured to (i) automatically generate the response to the request when the request is a first type of request that the serial interface engine is configured to recognize and (ii) pass (a) the request from the interface circuit to an external circuit and (b) the response to the request from the external circuit to the interface circuit when the request is a second type of request that the serial interface engine is not configured to recognize, as presently claimed.

8. Based upon my experience and work in the field of USB device architecture, the serial interface engine as contained in Silverman et al. would not be considered to automatically generate a response to a request, as presently claimed.

9. Specifically, Silverman's statement that "a single integrated circuit (IC) chip combines fixed function(s) and standard interfaces to handle the main portion of the design and a PLD (or equivalent) section for the user to program for their specific protocol or other implementation" (see column 4, lines 27-31 of Silverman) would be understood to teach that the PLD handles the protocol support, not the SIE.

10. The statement in Silverman that "USB transactions are automatically routed to the memory buffer 408. The processor 404 sets up pointers and block sizes in the buffer memory 408 for the USB transactions. Data is read from the USB interface 414, and is processed and packetized by the I/O processor 404" (see column 7, lines 9-14 of Silverman) does not teach that the serial interface engine (SIE) is configured to automatically generate the response to the request when the request is a first type of request that the serial interface engine is configured to recognize.

11. The further statement in Silverman that "The processor 404 is responsive to special purpose instructions stored in memory 406 for USB transaction processing and control data processing" (see column 8, lines 9-11 of Silverman) also does not teach that the serial interface engine (SIE) is configured to automatically generate the response to the request when the request is a first type of request that the serial interface engine is configured to recognize.

12. Silverman et al. are silent regarding the SIE 206 automatically generating a response to a request, as presently claimed.

13. A person skilled in the field of the present invention would recognize the SIE of Silverman as being a conventional USB SIE that acts as a conduit, passing (i) USB requests and data from a host to an outside intelligence (i.e., the PLD 208 or the processor 404) and (ii) responses from the outside intelligence to the host.

14. The Examiner's assertion that "Thus, it is clear [that] if the request is a standard USB request the SIE must generate a response, since the standard USB request is recognized by the SIE" (see page 7, lines 3-5 of the Office Action mailed October 4, 2004) is not supported by the cited passages of Silverman et al.

15. The Examiner's assertion that "USB transactions are handled by the SIE using standard USB protocol, and other non-USB transactions, unrecognized by the SIE via USB interface 204 will be handled by the PLD/PGA via SIE and USB interface" is not supported by the teaching of Silverman et al.

16. Silverman et al. do not disclose or suggest a serial interface engine (SIE) coupled to the interface circuit and configured to (i) automatically generate the response to the request when the request is a first type of request that the serial interface engine is configured to recognize and (ii) pass (a) the request from the interface circuit to an external circuit and (b) the response to the request from the external circuit to the interface circuit when the request is a second type of request that the serial interface engine is not configured to recognize, as presently claimed.

17. I hereby declare that all statements made herein of my knowledge are true and that all statements made on information and belief are true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or patents issued therefrom.

Date: 10 DEC 04

Andrew Warren